

The opinion in support of the decision being entered today
(1) was not written for publication in a law journal and
(2) is not binding precedent of the Board.

Paper No. 22

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte ROMAN SAPIEJEWSKI and MICHAEL J. MONAHAN

Appeal No. 1999-0414
Application No. 08/625,352

HEARD: January 23, 2001

Before KRASS, DIXON and BLANKENSHIP, Administrative Patent Judges.

KRASS, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the final rejection of claims 1-30, all of the pending claims.

The invention pertains to adjustments for headsets. More particularly, a coupling element for joining a headband and an earphone has a pivot. The pivot requires the application of a torque exceeding a predetermined threshold value in order to cause rotation. A torque threshold level adjuster is included for

establishing the threshold level.

Representative independent claim 1 is reproduced as follows:

1. A headset comprising:

a headband;

a first earphone;

a coupler coupling the headband and the earphone comprising a pivot having a torque resistance opposing the rotation of said pivot intercoupling said headband and said earphone constructed and arranged to require applying a torque exceeding a predetermined threshold value to cause rotation;

said pivot including a torque threshold level adjuster establishing said threshold level.

The examiner relies on the following references:

Bergin et al. (Bergin)	5,185,807	Feb. 09, 1993
Mirmilshteyn et al. (Mirmilshteyn)	5,293,647	Mar. 15, 1994
Urella et al. (Urella)	5,590,213	Dec. 31, 1996 (filed Feb. 15, 1995)

Claims 1-4, 8-10, 14-16, 19, 21-24, 26, 28 and 29 stand rejected under 35 U.S.C. § 102(b) as anticipated by Mirmilshteyn. Further, claims 1, 11-13 and 25 stand rejected under 35 U.S.C. § 102(b) as anticipated by Bergin. Claims 5-7, 11-13 and 25 stand rejected under 35 U.S.C. § 103 as unpatentable over Mirmilshteyn in view of Urella and claims 17, 18, 20, 27 and 30 stand rejected under 35 U.S.C. §

103 as unpatentable over Mirmilshteyn in view of Bergin.

Reference is made to the briefs and answer for the respective positions of appellants and the examiner.

OPINION

We turn first to the rejection under 35 U.S.C. § 102(b) based on Mirmilshteyn and note that while appellants state that the claims do not stand or fall together [principal brief-page 3], appellants' arguments are directed to only independent claims 1, 14 and 26. Accordingly, we will discuss independent claims 1, 14 and 26 and the claims dependent thereon will stand or fall with their respective parent independent claims.

Anticipation under 35 U.S.C. § 102 requires the presence in a single prior art disclosure of all elements of a claimed invention arranged as in the claim. Connell v. Sears, Roebuck & Co., 722 F2d. 1542, 1548, 220 USPQ 193, 198 (Fed. Cir. 1983).

Turning to independent claim 1, this claim requires that the coupler between the headband and the earphone comprises "a pivot having a torque resistance opposing the rotation of said pivot intercoupling said headband and said earphone constructed and arranged to require applying a torque exceeding a predetermined threshold value to cause rotation." Further, the pivot must include "a torque

threshold level adjuster establishing said threshold level.”

Referring to Mirmilshteyn, the examiner finds correspondence to the required elements of instant independent claim 1 by identifying pivot 8 of the reference as having a “torque resistance.” The examiner also identifies

elements 29 and 30 of the reference as being a “torque adjuster” for establishing the claimed threshold level. With regard to the application of a torque exceeding a predetermined threshold level to rotate the earphone, the examiner identifies push button 30 and spring 29 of Mirmilshteyn as elements of the prior art which meet the claimed limitation.

We disagree with the examiner and will not sustain the rejection of claim 1 (and, therefore, claims 2-4 and 8-10) under 35 U.S.C. § 102(b) over Mirmilshteyn. Nowhere in the patent disclosure does Mirmilshteyn mention anything about torque needed to overcome any threshold level. When push-button 30 is pressed, spring 29 is compressed and half-couplings 21, 24, 26 and 27 are disengaged so that coupling member 8 is disconnected from headband 3 and from holder 6 of the ear cup 1 [see column 4, lines 33-40]. This allows coupling member 8 to rotate relative to the headband 3 and it allows holder 6 with the ear cup to rotate relative to the coupling member. There is no disclosure in Mirmilshteyn about any torque

threshold that must be overcome in order to rotate coupling member 8 or holder 6. They rotate freely when push-button 30 is pressed.

Alternatively, when push-button 30 of Mirmilshteyn is released, after the most comfortable position for the ear cup is chosen, spring 29 engages the half-couplings and the coupling member 8 is fixed relative to the headband 3 and holder 6 is fixed relative to coupling member 8. Thus, the operation of push-button 30 either releases elements for free rotation or engages elements to set fixed positions. But, there is no disclosure or suggestion by Mirmilshteyn of adjusting torque threshold levels so that application of a predetermined torque is necessary to overcome a torque threshold value in order to cause rotation. Of course, one might consider that enough torque applied to the headset components of Mirmilshteyn even in the fixed position (push-button 30 released) would overcome the resistance of the fixed position and so one could say that a threshold torque value was exceeded. However, in that case, Mirmilshteyn's headset would probably be broken and unusable for its intended purpose. Similarly, one might

argue that in the free rotation position (push-button 30 pressed), since elements are freely rotatable, the torque threshold value is merely set very low and any amount of torque would overcome that threshold.

However, we do not view such an interpretation of Mirmilshteyn to be a fair one since no torque resistance, as claimed by appellants, is intended. Moreover, there would still be no “torque threshold level adjuster,” as claimed.

Accordingly, we will not sustain the rejection of claims 1-4 and 8-10 under 35 U.S.C. § 102(b) over Mirmilshteyn.

Turning now to independent claim 14, we will sustain the rejection of this broad claim as being anticipated by Mirmilshteyn. Clearly, the reference discloses a headset comprising a headband 3 having an inverted U-shape, and having distal ends defining an opening of variable dimension. The claim also calls for a “rigid structure having relatively movable sections for limiting said variable dimension.” When push-button 30 of Mirmilshteyn is pressed, coupling member 8 is allowed to rotate relative to the headband and holder 6 is allowed to rotate relative to the coupling member 8. This permits an adjustment of the headband for “limiting said variable dimension,” as claimed. Further, the push-button 30 and the related structure which permits this adjustment constitute a “rigid structure having relatively

movable sections,” as claimed.

Appellants argue that Mirmilshteyn does not disclose the claimed “rigid structure...” However, appellants’ arguments appear to rely on the headband structure of instant Figure 6 wherein the headband has relatively movable sections. The claim language, however, does not require that the rigid structure having relatively movable sections be on the headband itself. Rather, the claim

language recites a headset comprising a headband and a rigid structure having relatively movable sections for limiting said variable dimension. Thus, the claim language permits the rigid structure to be separate from the headband and appellants’ position, at page 9 of the principal brief, that the reference discloses that fixing means 17 and 18 are “not a part of headband 3,” is not well taken. Mirmilshteyn’s disclosure of fixing the coupling member 8 relative to the headband is not precluded by the language of instant claim 14. It appears that the instant claim language is not so limited as appellants’ arguments would indicate.

We will sustain the rejection of claim 14, and of claims 15, 16, 19 and 21-24 which depend therefrom, under 35 U.S.C. § 102(b) as anticipated by Mirmilshteyn.

Similarly, with regard to independent claim 26, we will sustain the rejection of

this claim, as well as that of claims 28 and 29 depending therefrom, under 35 U.S.C. § 102(b) as anticipated by Mirmilshteyn, because the claim language is broader than appellants' arguments would indicate.

Appellants argue that the claim's recitation of first and second earphones coupled to the headband at first and second distances from a central point of the

headband, wherein the first and second distances are substantially equal, and of a distance adjuster for coactively adjusting the first and second distances, distinguishes the claim over Mirmilshteyn.

We disagree. Mirmilshteyn clearly shows a headset having a headband wherein a first earphone 1 and a second earphone 2 are coupled to the headband a substantially equal distance from the central point of the headband. See Figure 1 of the reference. The adjustment of one earphone or the other through the use of the push-button 30 described supra results in an adjustment of a distance of one or the other earphones relative to the central point of the headband.

With regard to the rejection of claims 5-7, 11-13 and 25 under 35 U.S.C. § 103, appellants argue only independent claim 11 [See pages 14-16 of the principal brief]. Accordingly, although claims 5-7 depend from claim 1, and not

claim 11, claims 5-7, 12, 13 and 25 will stand or fall with claim 11.

The examiner applies Mirmilshteyn against claim 11, pointing out corresponding elements at pages 7-8 of the answer. The examiner recognizes that Mirmilshteyn fails to disclose the claimed pad and distance adjuster but relies on Urella for such a teaching, pointing out that Urella's headband has a

pad (elements 20, 24) and a distance adjuster (element 40) and that Urella's teaching of employing the pad and adjuster in order to provide comfort to the user would have led the skilled artisan to modify Mirmilshteyn to include such a pad and adjuster.

The examiner's rationale appears convincing to us. Thus, in our view, the examiner has established a prima facie case of obviousness and the burden of overcoming such a case by objective evidence or convincing argument is now shifted to appellants.

At page 14 of the principal brief, appellants argue that the primary reference does not disclose a pad, urging the earphone against an ear by applying force to the earphone and transferring a portion of the force to the earphone and for transferring a portion of the force to a temporal region of the user through the pad

and it does not disclose the portion controller for controlling the portion of the force. Appellants are correct in the assessment of the deficiencies of the primary reference. The examiner recognized the deficiencies, brought in a secondary reference to provide for those deficiencies and based the rejection under 35 U.S.C. § 103.

While appellants' arguments are clearly based on the embodiment of the invention shown in instant Figure 5 wherein the pad is shown at 47 and the ratcheted slot arrangement allows for apportionment of the force, we do not believe that claim 11 is limited to only the arrangement depicted in Figure 5. The headset of Urella shows a pad connected to a headband through button snap elements 24. The portion of the pad covering the button snap elements [Figure 2] appears to be situated such as to touch the "temporal region" of the user. Alternatively, in Figure 1 of the reference, there is shown a lobe [only one such lobe can be seen in the Figure but clearly there is one on each side] of the pad pointing in the downward direction and this lobe would appear to touch the "temporal region" of the user. When a force is applied to the earphone in Urella, this action would clearly exert some, or a portion, of the force to the sections of the pad situated against the "temporal region" of the user. By using latching element 40 to lock the headband

into place, the force on the temporal region will vary from the portion of the force applied to the temporal region when the latch 40 is not set and a force applied against the ear cups would permit some movement in the headband. Thus, latching element 40 would appear to act as a “portion controller,” as claimed, albeit not as intended by the device shown in Figure 5 of the instant application.

Contrary to appellants’ position, we agree with the examiner that Urella’s suggestion of employing the pad arrangement shown for the comfort of the user would clearly have led the artisan to employ such a pad arrangement in other headsets such as the one taught by Mirmilshteyn.

Accordingly, we will sustain the rejection of claims 5-7, 11-13 and 25 under 35 U.S.C. § 103.

With regard to the rejection of claims 17, 18, 20, 27 and 30 under 35 U.S.C. § 103, we will also sustain this rejection because appellants fail to argue the merits of these claims apart from independent claims 14 and 26. At page 17 of the principal brief, appellants state that since these claims are dependent on claims 14 and 26, “the reasoning set forth above in support of the patentability of claims 14 and 26 over the primary reference is submitted to support the patentability of claims 17, 18, 20, 27 and 30...” Since we have sustained the rejection of claims 14 and 26, we will also sustain the rejection of claims 17, 18, 20, 27 and 30.

Finally, we turn to the rejection of claims 1, 11-13 and 25 under 35 U.S.C. § 102(b) as anticipated by Bergin.

The examiner relies on screw 35 of Bergin as the claimed “torque adjuster” [claim 1] and “portion controller” [claim 11].

With regard to claim 1, we agree with appellants that screw 35 of Bergin is not a “torque adjuster,” as claimed. There is no indication in Bergin that any

torque threshold is to be overcome in order to cause rotation of a pivot coupling the headband and earphone. The apertures in the stirrups of Bergin, in cooperation with screw 35, act to give a tighter or looser fit to the headset. But, we find no indication in Bergin of a pivot having a torque resistance opposing the rotation of the pivot that intercouple the headband and the earphone so that a torque exceeding a predetermined threshold value is required for rotation. Further, we find no “torque threshold level adjuster,” as claimed, included in the pivot.

Therefore, we will not sustain the rejection of claim 1 under 35 U.S.C. § 102(b) as anticipated by Bergin.

With regard to claim 11, the examiner’s position is that screw 35 may be considered a “portion controller,” as claimed. Whether or not screw 35 is the

“portion controller,” we will sustain the rejection of claim 11, and hence claims 12, 13 and 25, because, in our view, the broad language of claim 11 is anticipated by Bergin.

Bergin clearly discloses a headset comprising an earphone 20 and a pad 22. The headband 12 is coupled to the pad 22 via stirrup 14 and ear dome 18. The arrangement permits a user to urge the earphone against the user’s ear by

applying a force [as by pressing with the hand] to the earphone. The force is transferred to a temporal region of the user through the pad 22. Note that the upper part of pad 22 will contact the temporal region, i.e., a portion of the head above the ears, of a user. There may be arguments as to whether only a fraction of the force less than the whole of the force is transferred to the temporal region. However, the broad language of the claim requires only that “a portion” of the force be transferred. A “portion” may entail the whole, or a 100%, portion. We find nothing in the claim that limits a “portion” to something less than the whole, notwithstanding this to be appellants’ intention. Thus, whether or not only part of the force in Bergin is transferred to the headband while most of the force is transferred to the temporal region of a user, or whether, the full force, as argued by appellants, is transferred to

the temporal region, in our view, the claim limitation is met by Bergin.

Now, claim 11 also calls for a “portion controller for controlling said portion of said force.” However, under our broad, yet reasonable interpretation of claim 11, allowing for a “portion” of the force to include the whole of the force, anything in Bergin, from the headband to the pads to even screw 35 or the user’s hands, which permits, or does not impede, the force from being transferred to the temporal region is a “portion controller.”

We have sustained the rejection of claims 14-16, 19, 21-24, 26, 28 and 29 under 35 U.S.C. § 102(b) over Mirmilshteyn but we have not sustained the rejection of claims 1-4 and 8-10 under 35 U.S.C. § 102(b) over Mirmilshteyn. We have also sustained the rejection of claims 5-7, 11-13, 17, 18, 20, 25, 27 and 30 under 35 U.S.C. § 103, as well as the rejection of claims 11-13 and 25 under 35 U.S.C. § 102(b) over Bergin. But, we have not sustained the rejection of claim 1 under 35 U.S.C. § 102(b) over Bergin.

Accordingly, the examiner’s decision is affirmed-in-part.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

Appeal No. 1999-0414
Application No. 08/625,352

AFFIRMED-IN-PART

ERROL A. KRASS)	
Administrative Patent Judge)	
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)	
)	BOARD OF PATENT
JOSEPH L. DIXON)	APPEALS AND
Administrative Patent Judge)	INTERFERENCES
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HOWARD B. BLANKENSHIP)	
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